

Revision for GEMC: a database driven Monte Carlo simulation program

Technical requirements

PDF format: Yes

Copyright: Submitted on time

References: According to https://www.epj-conferences.org/doc_journal/woc/pdf_guidelines.pdf > “*Make sure that your list of references is presented correctly*”, the given name and surname for references [2] and [3] are provided, but incorrectly written. For example, in reference [3], “*Ungaro M.*” should be “*M. Ungaro*” instead, same in reference [2]. [4] and [5] references seem to be correct.

Thanks, fixed.

Global comments

The figures captions use a non-italic font, as does the template provided for Microsoft Word defaults. There is no differentiation in terms of font style and font size between the figures caption and the body of the paper.

I made the figure caption fonts italic and smaller. If this is against the proceeding policy it can be easily reverted.

This is a personal suggestion, but for a better understanding, clarity, and readability, I would suggest providing less explanations of figures in the captions and elaborating on them a bit more in the body of the paper. There are no strict guidelines in this regard, so the author is free to decide.

Thanks, I adopted this suggestions for the Figures that had long captions: 2, 3, 4, 5 and 6.

Abbreviations such as STL have been explained in a footnote, which is great. However, some non- commonly known abbreviations, such as ADC, TDC, FADC or SRO have not been explained. I would appreciate if author could add footnotes for these abbreviations.

Sorry about that. Added the footnotes.

Punctuation errors and typos

In Figure 1, there are some typos such as “Additional configurations such as which **physics** ...” and “magnetic field, which **experiments** ...”.

Fixed.

In section 2.2 Python API:

- A missing comma after “In Fig.2, an example ...”
- Figure 3 lacks end-of-sentence and comma punctuations. It should be “exceeding the sensitive time window. As a result, ...”

Fixed.

In section 2.4:

- Capitalizing or not words after a colon can lead to a long linguistic discussion, which is not necessary for our purposes. However, it has been noticed that concretely in this section, a punctuation error has been noticed in the list of bullet points. Some words after the colon are capitalized, some are not. They should be consistent.

- It has also been noticed that some of the items in the list lack end-of-sentence punctuation (“.”).

Thanks for this, throughout the paper fixes: sentence after colons are lowercased. All items end with a period.

In section 3.2:

- Missing a reference at the end of the paragraph in the CTOF bullet point, concretely in “[...] in the light guides [?];
- Missing comma after “In Fig.5, a few components ...”

Fixed.

In section 4:

- I recommend using **Conclusion** as appropriate heading in the section 4 to finalize the paper, instead of **Summary**. Summary is more meant to be placed at the beginning of a scientific paper, providing a brief overview of the main points the paper will outline, and to introduce the reader to the topic. The conclusion discusses the implications and significance of the points discussed in the paper.

Thanks! Fixed.

- Figure 6 is placed incorrectly in the paper, overlapping the references section. The references section must be placed at the end of the paper, as required by the journal guidelines. The journal has no specific guidelines on whether the references should be on a separate page or at the end of the paper just after the last heading. It is generally recommended to place the references on a separate page for readability and clarity.

Fixed.

Notes for the author

In general, the paper is well-structured and easy to read, and I found it interesting. One of the purposes of this paper is to simplify things and abstract the users from having expertise in complex general-purpose languages (GPLs) such as C++, so that they can focus on what is important: experiment-specific details.

For future iterations, the author could consider using domain-specific languages (DSLs). DSLs are designed to increase productivity, improve quality, and reduce complexity, among many other things. This will certainly eliminate the need for users to have expertise in any general-purpose language.

Thanks so much for this suggestion, which perfectly encapsulate the vision of this project. The python API is a good step in reducing the users overhead, however you're right, it is still python, with possibly user errors and intricacies. The end goal are a DSL to build geometry and a graphical interface as alternatives to the python API.